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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,036	02/03/2004	Ling Jong	8500-0264.10	6185

23980 7590 04/05/2005

REED INTELLECTUAL PROPERTY LAW GROUP
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EXAMINER

SHIAO, REI TSANG

ART UNIT	PAPER NUMBER
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1626

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/772,036

Applicant(s)

JONG ET AL.

Examiner

Robert Shiao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on responses filed on 01/14/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-24, 54-58, 85-97, 100, 103 and 110-112 is/are pending in the application.
- 4a) Of the above claim(s) 85-97, 100, 103 and 110-112 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-24 and 54-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/05/04, 2/03/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 14-24, 54-58, 85-97, 100, 103, 110-112 are pending in the application.

Responses to Election/Restriction

2. Applicant's election with traverse of Group I claims 14-24, 54-58, in part, in the reply filed on January 14, 2005, is acknowledged. The traversal is on the grounds that methods of use of III-IV should be examined with compounds of Groups I. This is not found persuasive, and the reasons are given, *infra*.

Status of the Claims

3. Claims 14-24, 54-58, 85-97, 100, 103, 110-112 are pending in the application. The scope of the invention of the elected subject matter is as follows:

Claims 14-24, 54-58, in part, drawn to compounds/compositions of formula (II), wherein the variables R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^{11} , R^{12} , R^{13} , and R^{14} independently do not represent heteroaryl or heterocycle, the variables R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^{11} , R^{12} , R^{13} , and R^{14} independently are not substituted with heteroaryl or heterocycle; any two adjacent (ortho) variables R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^{11} , R^{12} , R^{13} , and R^{14} are not linked to form a 5- or 6-membered cyclic rings or fused five-membered and/or six-membered ring, or heteroaromatic ring having heteroatoms, or heteroalicyclic ring having heteroatoms, the variable X does not represent heteroarylene.

The above mentioned withdrawn compounds which are withdrawn from consideration as being for non-elected subject matter differ materially in structure and

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composition from the compounds of the elected invention. The withdrawn compounds contain varying functional groups (i.e., heteroaryl or heterocycloalkyl of the variable R^1 , R^5 , or R^2) which differ from those of the elected invention such as oxazole, diazole, pyridine, morpholine, etc, which are chemically recognized to differ in structure and function. This recognized chemical diversity of the functional groups can be seen by the various classification of these functional groups in the U.S. classification system, i.e., class 548 subclass 215(+) (oxazole), class 548 subclass 300.1(+) (diazole), class 546 subclass 249 (+) (pyridine), class 544 subclass 106(+) (morpholine), etc. Therefore, again, the compounds which are withdrawn from consideration as being for non-elected subject matter differ materially in structure and composition and have been restricted properly.

Group I and Groups III-IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the process for using (i.e., treating cancer) the product of compounds of formula (I) having indole moiety as claimed can be practiced with another materially different product of McAfee's US 5,206,377.

The Markush group set forth in the claims includes both independent and distinct inventions, and patentably distinct compounds (or species) within each

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invention. However, this application discloses and claims a plurality of patentably distinct inventions far too numerous to list individually. Moreover, each of these inventions contains a plurality of patentably distinct compounds, also far too numerous to list individually. Moreover, the examiner must perform a commercial database search on the subject matter of each group in addition to a paper search, which is quite burdensome to the examiner.

Claims 14-24, 54-58, in part, embraced in above elected subject matter, are prosecuted in the case. Claims 14-24, 54-58, in part, not embraced in above elected subject matter, and claims 85-97, 100, 103, 110-112 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention.

The requirement is still deemed proper and is therefore made **FINAL**.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14-24, 54-58 are rejected under 35 U.S.C. 102(b) as being anticipated by (1) Fuerstner et al. publication, *Angewandte Chemie*, International Edition in English, 1995, 34(6): 678-81, see CAS: 123:83146; (2) Black et al. publication, *Journal of the Chemical Society, Chemical Communications*, 1993, 10: 819-21, see CAS: 119:271129;

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(3) Pindur et al. publication, Journal of Heterocyclic Chemistry, 1987, 24(1) :159-63, see CAS:107:217419; (4) Chu et al. publication, Journal of Heterocyclic Chemistry, 1984, 21(6):1901-3, see CAS: 102:184940; (5) Brieskorn et al. publication, Archiv der Pharmazie (Weinheim, Germany), 1979, 312(12):1046-51, see CAS: 93:71451; (6) Hindo et al. publication, Chemical & Pharmaceutical Bulletin (1974), 22(11): 2728-31, see CAS:82:111897; (7) Suzuki et al. publication, Chemical & Pharmaceutical Bulletin, 1973, 21(12):2739-48, see CAS:80:59818; or (8) Hill et al. publication, Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999), 1972, (9-10):1210-19, see CAS: 77:5277.

Applicants claim a compound/compositions of formula (II). The instant compounds are found in the pages 7-29 of the specification.

Fuerstner et al. disclose two compounds 1H-Indole, 2,2'-(1,4-phenylene)bis[3-phenyl-, and 1H-Indole, 2,2'-(1,4-phenylene) bis[3-methyl-. Fuerstner et al. compounds clearly anticipate the instant compounds of formula(II), wherein variables R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^{11} , or R^{12} independently represents hydrogen, R^{13} , and R^{14} independently represent C_5 - C_{20} aryl (i.e., phenyl) or C_1 - C_{24} alkyl (i.e., methyl), and variable X represents arylene (i.e., phenyl), see RN:164936-88-3 and 164936-89-4.

Black et al. disclose a compound 1H-Indole-7-carboxaldehyde, 2,2'-methylenebis[4,6-dimethoxy-3-phenyl-. Black et al. compound clearly anticipate the instant compounds of formula(II), wherein variables R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^{11} , or R^{12} independently represents hydrogen, formyl, C_1 - C_{24} alkoxy (i.e., methoxy), R^{13}

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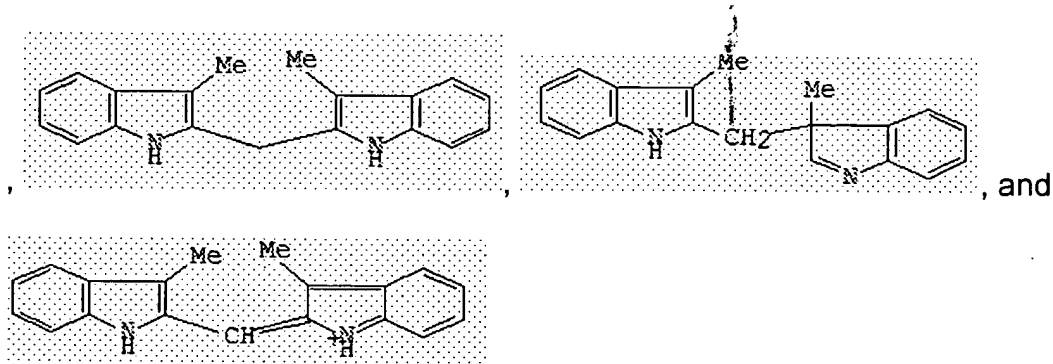
and R^{14} independently represent C_5 - C_{20} aryl (i.e., phenyl), and variable X represents $CR^{15}R^{16}$, and R^{15} and R^{16} independently represent hydrogen, see RN:151321-09-4.

Pindur et al. disclose two compounds 1H-Indole, 2,2'-methylenebis[1,3-dimethyl-, and 1H-Indole, 1,3-dimethyl-2-[(3-methyl-1H-indol-2-yl)methyl]-. Pindur et al.

compounds clearly anticipate the instant compounds of formula(II), wherein variables R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^{11} , or R^{12} independently represents hydrogen, or C_1 - C_{24} alkyl (i.e., methyl), R^{13} and R^{14} independently represent C_1 - C_{24} alkyl (i.e., methyl), and variable X represents $CR^{15}R^{16}$, and R^{15} and R^{16} independently represent hydrogen, see RN: 91455-03-7 and 110968-29-1.

Chu et al. disclose a compound 1H-Indole-3-ethanamine, 2,2'-thiobis[N,N-dimethyl-, monohydrochloride. Chu et al. compound clearly anticipate the instant compounds of formula(II), wherein variables R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^{11} , or R^{12} independently represents hydrogen, R^{13} and R^{14} independently represent or di-(C_1 - C_{24} alkyl)-substituted amino, and variable X represents S, see RN: 96249-78-4.

Brieskorn et al. disclose four compounds 1H-Indole, 2,2'-methylenebis[3-methyl-,



Brieskorn et al. compounds clearly anticipate the instant compounds of formula(II), wherein variables R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^{11} , or R^{12} independently

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represents hydrogen, R^{13} and R^{14} independently represent C_1 - C_{24} alkyl (i.e., methyl), and variable X represents $CR^{15}R^{16}$, and R^{15} and R^{16} independently represent hydrogen, or R^{15} and R^{16} together form $=CR^{18}R^{19}$, where R^{18} and R^{19} are hydrogen, see RN: 36798-1 and formula (I), (II), or (III).

Hino et al. disclose a compound 1H-Indole, 2,2'-thiobis[3-methyl]-. Hino et al. compound clearly anticipate the instant compounds of formula(II), wherein variables R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^{11} , or R^{12} independently represents hydrogen, R^{13} and R^{14} independently represent or C_1 - C_{24} alkyl (i.e., methyl), and variable X represents S, see RN: 55132-21-3.

Suzuki et al. disclose a compound 1H-Indole, 2,2'-thiobis[3-(phenylmethyl)-. Suzuki et al. compound clearly anticipate the instant compounds of formula(II), wherein variables R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^{11} , or R^{12} independently represents hydrogen, R^{13} and R^{14} independently represent or C_6 - C_{24} aralkyl, and variable X represents S, see RN: 51206-69-0.

Hill et al. disclose a compound 1H-Indole, 2,2'-methylenebis[3-ethyl-1-methyl]-. Hill et al. compound clearly anticipate the instant compounds of formula(II), wherein variables R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^{11} , or R^{12} independently represents hydrogen, or C_1 - C_{24} alkyl (i.e., methyl), R^{13} and R^{14} independently represent C_1 - C_{24} alkyl (i.e., ethyl), and variable X represents $CR^{15}R^{16}$, and R^{15} and R^{16} independently represent hydrogen, see RN: 36798-56-8.

Applicants are requested to amend the claims (i.e., limitation of variables) to overcome the rejection.

Objection

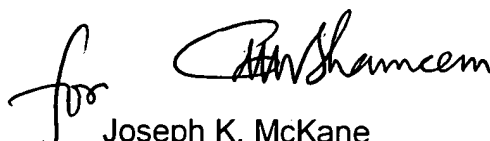

5. Claims 14-24, 54-58 are objected to as containing non-elected subject matter, i.e., 5- or 6-membered cyclic rings or fused five-membered and/or six-membered ring, or heteroaromatic ring having heteroatoms, or heteroalicyclic ring having heteroatoms, heteroarylene of variable X, etc. It is suggested that applicants amend the claims to the scope of the elected subject matter as defined on the pages 2-3 *supra*.

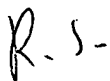
Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Shiao whose telephone number is (571) 272-0707.

The examiner can normally be reached on 8:30 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


for 
Joseph K. McKane
Supervisory Patent Examiner
Art Unit 1626



Robert Shiao, Ph.D.
Patent Examiner
Art Unit 1626

March 28, 2005